ception to this rule of law arises in cases of emergency or public disaster. This exception will be discussed later.)

(*b*) The supervisors, in administering public funds, are acting as trustees for the general public and, therefore, they are legally bound so to administer the funds as to lighten the tax supporters' burden as much as possible. Therefore, when an applicant seeking admission is found to be partially able to pay the cost of hospitalization, he must be charged an amount which is within his means. Of course, this in no instance can be an amount adequate to cover the full cost to the community of his hospitalization and treatment because if he is able to pay that amount, he should not have been admitted in the first place. On the other hand, if the applicant for admission is able to pay something toward the cost of hospitalization and treatment, he should be required so to pay in order that the taxpayers of the county will not be unduly burdened.

3. The California statutes dealing with powers and duties of Boards of Supervisors with respect to the admission of patients to county hospitals use the term "indigent." In order that this term may have a definite meaning, it is defined as follows:

The word "indigent" when used in connection with admission to county hospitals includes an inhabitant of a county who possesses the required qualifications of residence, and who has insufficient means to pay for his maintenance in a private hospital after providing for those who legally claim his support. (11 Cal. App. (2d) 550.)

4. In cases of emergency or public disaster such as fire, earthquake, floods, storms or epidemics, people may be injured or rendered suddenly ill and immediate hospitalization may be necessary to save life. In such cases delays in admission to promote investigation of the final condition of the payment might cost loss of life. Therefore, in cases of emergency or public disaster, an exception is made to the requirement of due inquiry and investigation prior to admission, and it is held that:

Such patients should be admitted promptly, investigation of their ability to pay should follow. Ordinary humanity could dictate no other course. In such cases boards of supervisors should not hesitate to collect the full cost of hospitalization from those able to pay, and from others not able to pay in full, a fair amount, to be determined after an investigation of their resources.

The foregoing summarizes the essential rules of law laid down by the District Court of Appeal in connection with the admission of patients to county hospitals. It is to be noted that the court distinctly and definitely held that the fact of indigency is to be determined upon due inquiry and investigation *prior* to admission to the county hospital except that in cases of emergency or public disaster investigation may be delayed until conditions have returned to normal. A charge may be made by the county in those situations where the applicant is found to be an indigent but is also found to have sufficient funds to pay a portion of the cost to the county of hospitalization and medical care. Only in emergency cases and in the event of a public disaster may patients be admitted without inquiry and investigation and the question of their ability to pay determined afterward.

It must also be borne in mind that the ability to pay of the applicant is to be determined at the time of application, not at some prior date or, on the other hand, at some later date. Moreover, it is indisputable that the State of California has authorized counties to maintain county hospitals for the sole purpose of promoting the public health and welfare of *all* citizens in the respective counties and that the State has limited admission therein to "indigents" because public policy must not countenance use of public funds for the benefit of private citizens who have no *need* for governmental aid. These principles caused the District Court of Appeal to forbid admission of patients wholly able to pay (either themselves or through relatives legally liable for their support) for private hospitalization. On the other hand, these principles likewise must forbid the various boards of supervisors from so administering their public trust that people unable to pay are forever oppressed rather than being protected. The general welfare certainly is not promoted by endeavors to collect from indigents if they later acquire some property. Their progress should be promoted, not impeded.

SPECIAL ARTICLES

CALIFORNIA MEDICAL ECONOMIC SURVEY*

A Statement by the Bureau of Medical Economics [of the American Medical Association]

The California Medical Association in 1934 was accepted by the Federal Emergency Relief Administration as the "Supporting Sponsor" of the California Medical Economic Survey. The published volume contains, as a foreword, the actions which led to the initiation of the report, addenda to the foreword, table of contents, financial reports, letters pertaining to the interpretation of Works Progress Administration regulations, and informal comments concerning possible interpretations and conclusions to be drawn from the factual data.

This survey adds 143 more tables and fifty-seven additional charts to the already large accumulation of figures which has been assembled from time to time under the auspices of various agencies and organizations in an attempt to analyze the need and receipt of medical care and the cost of the medical and hospital services rendered.

Many of the conclusions around which controversy over the distribution of medical services has arisen in recent years are in some way related to the use of the words "adequacy" and "inadequacy." These words are used frequently in the tables of the California Medical Economic Survey but, unfortunately, their use in this survey does not offer much help in a clarification of their application to medical, dental, and hospital care.

A definition of the medical and dental care that is apparently considered "adequate" appears on page 44 of Addendum X.

The medical and dental care of a population and its members may be called "adequate" if all the following conditions are fulfilled:

1. In the opinion of qualified experts in public health service and sanitary engineering, preventive and sanitary services intended to diminish the incidence of disease and injury to the whole population are developed to the state of maximum efficiency, *i. e.*, to the point at which curative and other services to all individuals by private or other practitioners become more efficient in preventing damage and more economical of professional personnel and equipment than additional public preventive work.
2. In the opinion of qualified practitioners who have knowledge of the persons concerned, curative services and other individual treatment by private or other practitioners are available and obtainable to the whole population at need in the amounts and variety which are necessary or prudent in reducing prospective damage to the person of the patient.
3. Additional services for the comfort and convenience of patients—beyond those needed in the reduction of damage—are available and obtainable to the whole population in accordance with the medical and dental habits and customs of the people.

The definition gives one the impression that the first element is a counsel of perfection which, when reduced to a simple statement, seems to mean that medical and dental services, unless developed to a state of maximum efficiency, are unsatisfactory. Webster's New International Dictionary defines adequacy as "equal to or sufficient for some (specific) requirement" and gives as synonyms "proportionate, commensurate, competent, and suitable." The dictionary point of view, which may be supposed to reflect the idea commonly conveyed by the word "adequate," indicates that adequacy always refers to some comparison. In the California survey the purpose for which adequacy is urged is not defined, but the report continuously carries the assumption that adequacy means perfection. Once this assumption is fixed in the mind of the reader of the statistical tables, he is continuously confronted with the question of whether any of the medical services now available are adequate. If, however, the term "adequate" is interpreted as equal to or sufficient for some requirement, then it must have some relation to actualities and environment and to the "adequacy" of other elements which are essential to health, such as food, shelter, fuel, and clothing.

The same lack of definiteness is found with regard to standards or definitions of illness and diagnosis. It appears that the authority for the diagnosis in too large a per-

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See also editorial comment, on page 236.

centage of the cases was the report of a nonmedical investigator concerning the statement made by the person interviewed, and in many cases it seems that the patient must have made his own diagnosis. Moreover, the same vagueness prevails on the subject of medical treatment. Apparently, the investigators did not ask or were not instructed to inquire as to the length of time that had elapsed since treatment had been received. Nowhere is it apparent that these investigators inquired concerning the nature of the treatment received. This lack of reasonable definition of some of the basic terms used in the survey and the apparent failure to secure some of the basic data pertaining to medical care raise questions as to the value of many of the tables which purport to show "inadequacy" in all these fields.

There is a tendency throughout the published tables to exaggerate the lack of medical care, the cost of such services, and the implied defects of the medical profession, by the arrangement of the tables and the wording of captions. Figure 2 in Table 6 illustrates this point. The population of California used in the survey was based on "California Taxpayers' Association estimates based on average daily attendance in public schools." The Census Bureau of the United States Department of Commerce issues periodic estimates of the population of the states, but there appears no explanation of the use of a local estimate in preference to the Census Bureau estimate of the population. Likewise, the number of physicians in California in 1934 is less by 1,407 than the number given in the 1934 American Medical Directory. In several instances *The Journal of the American Medical Association* and the "Directory of the American Medical Association" are given as sources of information. However, the discrepancy cited is nowhere explained.

The reported need for dental care on date of family interview is shown in Table 25. The percentage of persons of all known incomes in all communities who were reported in need of dental care is given at 9.7. This figure is in sharp contrast with the estimates from a number of other studies which show that the number of persons requiring treatment for caries or other dental conditions seldom falls lower than 75 per cent of the whole population. The number of persons per thousand surveyed reporting specific diseases at time of family interview is shown in Figure 16. The wording of the caption of this chart indicates that these graphs represent the prevalence rates of disease. When compared with the prevalence rates of other studies, the California figures are from about three to more than ten times larger. It is possible that the charts in Figure 16 do not represent prevalence rates as stated in the caption, but are actually the incidence rates for a three-month period. However, if the incidence rate from other studies is compared wherever comparison can be made with the rates in Figure 16, there are still wide discrepancies. If Figure 16 is used to represent the prevalence rate of specific disease, California is depicted as a very unhealthful place in which to live.

The payment of medical bills is shown in Table 47, in which the ratio of expenditures to charges in different income groups is given. It is interesting to note that in a considerable number of instances in which the charges incurred were $40 or less, more than 100 per cent, and in one instance 265 per cent appear to have been paid. There are many who doubtless would be glad to know what device was used to induce patients to pay more than 100 per cent of the charges for medical services.

It is very difficult to reconcile Tables 48 and 116. Presumably, Table 48 represents the percentage balance of family medical debts and charges, and Table 116 represents the percentage of collections of charges for medical services made by physicians. Table 48 indicates that, for all known incomes in all communities, 22.9 per cent of the family debts and charges were unpaid. Table 116 indicates that physicians with all incomes collected 74.1 per cent of their charges for services. Three per cent of all medical charges are thus unaccounted for.

It appears that the sample of physicians on which Figure 31 is based, "Type of Practice of Physicians Reporting," must have been overweighted with specialists. An analysis of the types of practice of the physicians contained in the 1931 American Medical Directory shows that the number of physicians devoting their entire time to a specialty was 19.8 per cent instead of about 33.5 per cent, as shown in Figures 31 and 34. In the 1936 American Medical Directory, 21.9 per cent of California physicians are recorded as devoting their entire time to a specialty. These complete figures for all the recorded physicians in California were available at the time the California Medical Economic Survey was conducted. The California survey figures give a grossly distorted picture of the percentage of general practitioners and specialists in that state.

The relative importance of medical payments among family expenditures shown in Tables 60 and 61, and the average charge per person and family reporting medical charges of zero and over, shown in appendix B-11, give a false impression of the actual amount of medical services received in the various income groups. For example, a charge of $18.53 to an individual in the income group of zero to $499 may represent as much as or more medical care than a charge of $47.10 to an individual in the $3,000 to $4,999 income group. Furthermore, since it appears that a large percentage of the incurred medical bills in the low income groups remain unpaid, neither the size of the medical charges nor the amount actually paid for services by these low income groups can be taken as a dependable measure of the quantity or quality of the services received. Unfortunately, the tables in this survey are arranged in such a manner as to leave the impression that the amount of medical care received in each income group is directly proportionate to the amount of money paid for such care.

The tables and figures in this report give the reader the impression that there has been an effort to arrange a build-up for sickness insurance. If such were the case, scientific interest would have required the inclusion of facts easily available to show the distribution of physicians both as to specialties and as to population by small towns, rural districts, and so on, which is more distorted in any of the countries having sickness insurance than it is in California. The distribution of physicians according to population is no dependable measure of the quantity of medical services available to any specific community. Illness and the means for its relief bear no relation to state or political subdivision boundaries. The use of the population per physician measure of the availability of medical services in California is no more dependable than in any other section of the United States.

The question may well be raised as to the method of conducting the survey and the personnel used to collect the information. Inaccuracies and deficiencies in basic data. collected by persons who have little or no knowledge of medicine, will of necessity be reflected and oftentimes amplified in the finished tables. Perhaps the apparent distortions and discrepancies and the disagreements with other similar studies may be explained in the words of the director—

> In a word, even complacence or ignorance of facts cannot be considered as adequate grounds for maintaining that the picture here presented has been overexaggerated. Rather is the reader asked to put himself in the position of *looking from the viewpoint* of the standard of adequacy expressed above. It is hoped that he will then see, in the data, many of the main features of the real deficiencies in the health services exhibited in a suitable perspective. It is hoped, as indicated in the previous paragraph, that he will also realize he is looking at the picture through a reducing glass.

which seems to mean that the nature and amount of medical care provided by the medical facilities in California are entirely unsatisfactory when evaluated in terms of the definition of "adequacy," used in this survey.

RURAL COMMUNITY HOSPITALS: IS SUBJECT OF NEW FEDERAL BULLETIN*

The shortage of doctors, hospitals, and general medical facilities in certain rural areas is brought out in a bulletin on "Hospitals for Rural Communities" published by the United States Department of Agriculture. The study was made by the Bureau of Agricultural Economics. Blanche Halbert, formerly of the Bureau staff, is the author.

Noting that well-equipped rural hospitals will encourage doctors to enter country practice, the author says that the shortage of doctors in most small rural communities has become a serious problem. In a number of states where most of the people live in the country, there is only one doctor for every 1,000 to 1,500 persons. On the other hand,

* From the United States Department of Agriculture.